

REMARKS

Claims 1-30, as amended, and new claims 31-34 are pending in this application. Applicants have amended certain claims in this Response because Applicants believe these amendments serve a useful clarification purpose, and are desirable for clarification purposes, independent of patentability. Accordingly, Applicants respectfully submit that the claim amendments do not limit the range of any permissible equivalents.

In particular, Applicants have amended claims 1, 15, and 29 to include specific resilient thermoplastic materials having a Vicat softening temperature of about 38°C or higher. These materials were originally recited in dependent claims 3-4 and 16-17, which have now been canceled.

Applicants note that independent claims 1, 15, and 29 were returned to their original state (as filed on August 29, 2001), with the exception of minor typographical corrections, prior to adding the specific thermoplastic materials now recited therein. As such, the subject matter of claims 1 and 15, as currently written, was before the Examiner prior to the previous Response in the form of dependent claims 4 and 17, respectively. Because claims 4 and 17 were not previously rejected by the Examiner as anticipated by or obvious over the cited references, Applicants believe the claims are in condition for allowance.

Furthermore, independent method claim 29 also incorporates the specific thermoplastic materials now included in independent claims 1 and 15. While a dependent claim was not originally written to cover the specific materials now included in claim 29, Applicants believe that this claim is also in condition for allowance at least by virtue of the previously non-rejected subject matter it now contains.

New claims 31-34 have been added to recite additional embodiments of the invention, which are fully supported by the Specification as follows:

Claim	Specification
31	Page 18, lines 5-31
32	Page 18, lines 5-31
33	Page 17, lines 10-15
34	Page 9, line 31 to Page 10, line 5

As no new matter has been added by the amendments herein, Applicants respectfully request entry of these amendments at this time.

THE REJECTION UNDER 35 U.S.C. § 112

The Examiner rejected claims 1-30 under 35 U.S.C. § 112, second paragraph, as being indefinite. In particular, the Examiner requested a clear definition of "homogeneous". Applicants respectfully submit that the term "homogeneous" is well understood by those of ordinary skill to mean that the components of the mixture are too intimately combined to be distinguished from one another by visual observation. As explained in the previous Response, and in more detail below, the conventional mixing methods of the cited references do not result in the level of homogeneity achieved by the present invention. However, in the interest of expediting the examination of the application, Applicants have removed the term "homogeneous" from independent claims 1 and 15.

Because independent method claim 29 originally contained the phrase "to allow substantially homogeneous mixing," Applicants have not removed this phrase from the claim. Applicants respectfully submit that one of ordinary skill in the art would recognize the level of homogeneity covered by claim as written, especially in light of the Specification. *See, e.g.,* Specification at Page 19, lines 15-27.

For the reasons above, Applicants respectfully submit that the § 112 rejection is overcome. As such, Applicants respectfully request reconsideration and withdrawal thereof.

THE REJECTIONS UNDER 35 U.S.C. §§ 102 and 103

Claims 1-2, 5-7 and 10-14 were rejected under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,833,553 to Sullivan *et al.* or as set forth on page 3 of the Office Action. In addition, claims 1-2, 5-7, 10, and 12-14 were rejected under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,895,105 to Nesbitt as set forth on page 3 of the Office Action. Moreover, claims 1-2, 5-7, 10-15, 18-21, and 24-28 were rejected under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,779,562 to Melvin *et al.* as set forth on page 3 of the Office Action. The Examiner also rejected claims 8-9 and 22-23 under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 6,431,999 to Nesbitt as set forth on page 4 of the Office Action. Finally, claim 29 was rejected under § 103(a) as obvious over Sullivan, Nesbitt '105, or Melvin '562.

As discussed in the previous Response filed March 17, 2003, all of the cited references contain almost identical disclosures with regard to a method of mixing

polypropylene with a rubber-based elastomer to form a core composition below the melting temperature of polypropylene. None of the cited references, however, discloses or even suggests the specific thermoplastic materials now recited in all of the independent claims. As mentioned above, the subject matter recited in independent claims 1 and 15, which was previously recited in dependent claims 4 and 17, respectively, was not been rejected by the Examiner as anticipated by or rendered obvious over the cited references. As such, Applicants believe that the Examiner also recognizes that this subject matter is not disclosed or even suggested in the cited references.

In fact, the thermoplastic materials now recited in the independent claims are very different from the polypropylene of the cited references both in structure and "performance" in a composition. By way of example, Hytrel 3078, which is used as a representative high Vicat softening thermoplastic material according to the invention in Examples 1-4 (Specification at Page 24, line 20 to Page 25, line 26), is a hydrophilic resilient block copolymer with soft and hard segments. While Hytrel 3078 has an overall melting point of about 170°C, the low glass transition temperature of the soft segment allows the polymer to be more easily dispersed at a mixing temperature of 95°C. On the other hand, as understood by those of ordinary skill in the art, because polypropylene is a non-resilient, crystalline material, mixing it at a temperature below its melting point would not allow it to be distributed evenly throughout the resultant composition. Instead, the polypropylene resin would be dispersed in the matrix in a random domain (like powder pellets) and would actually be visible in the resulting composition.

Moreover, Applicants believe that this explanation of differences between the materials presently claimed and the polypropylene of the cited art also satisfies the Examiner's concerns (Office Action at Page 4, ¶ 5) regarding Applicants' arguments filed in the previous Response having a possible conflict with Applicants' examples.

Finally, Applicants respectfully disagree that the step of cooling recited in independent claim 29 is obvious over the cited references. The Examiner's suggestion that the initial blend may be cooled and stored is not found in any of the cited references. Moreover, the Examiner's statement that saving energy costs would motivate a skilled artisan to cool and then reheat the blend ignores the fact that it would be even more energy efficient to carry out the process as described in the references, *i.e.*, by not cooling the blend until it has been fully processed. However, in light of the amendments to claim 29, Applicants respectfully submit this rejection is moot.

For the reasons above, Applicants respectfully submit that the §§ 102 and 103 rejections based on the cited references have been overcome. Thus, Applicants respectfully request reconsideration and withdrawal thereof.

**REVOCATION AND POWER OF ATTORNEY
AND ATTORNEY DOCKET NUMBER**

Applicant submitted a Revocation and Power of Attorney on March 17, 2003, which has been accepted. While the correspondence information and representation has been updated, the docket number remains unchanged. Therefore, Applicant respectfully requests that the attorney docket number be changed from 174-983 to 20002.0101.

CONCLUSION

All claims are believed to be in condition for allowance. If the Examiner believes that the present amendments still do not resolve all of the issues regarding patentability of the pending claims, Applicants invite the Examiner to contact the undersigned attorneys to discuss any remaining issues.

A Petition for Extension of Time is submitted herewith to extend the time for response one month to and including September 2, 2003, since the extended August 30, 2003 due date falls on a Saturday and Monday was a recognized PTO holiday. No other fees are believed to be due at this time. Should any fee be required, however, please charge such fee to Swidler Berlin Shereff Friedman, LLP Deposit Account No. 195127, Order No. 20002.0101.

Respectfully submitted,
SWIDLER BERLIN SHEREFF FRIEDMAN, LLP

Dated: September 2, 2003

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